



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2012-1330; Directorate Identifier 2012-CE-006-AD;

RIN 2120-AA64

Airworthiness Directives; Cessna Aircraft Company Airplanes

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of proposed rulemaking (NPRM).

SUMMARY: We propose to adopt a new airworthiness directive (AD) for certain Cessna Aircraft Company (Cessna) (previously COLUMBIA or LANCAIR) Models LC40-550FG, LC41-550FG, and LC42-550FG airplanes. This proposed AD was prompted by reports that during maximum braking, if the brakes lock up and a skid occurs, a severe oscillatory yawing motion or “wheel walk” may develop, which could result in further significant structural damage to the airplane. This proposed AD would require insertions into the pilot’s operating handbook (POH) and the airplane maintenance manuals (AMM) regarding proper use of the brakes and inspection of the aft fuselage. We are proposing this AD to correct the unsafe condition on these products.

DATES: We must receive comments on this proposed AD by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

ADDRESSES: You may send comments, using the procedures found in 14 CFR 11.43 and 11.45, by any of the following methods:

- Federal eRulemaking Portal: Go to <http://www.regulations.gov>. Follow the instructions for submitting comments.
- Fax: 202-493-2251.

- Mail: U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

- Hand Delivery: Deliver to Mail address above between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays.

For service information identified in this proposed AD, contact Cessna Aircraft Company, Customer Service, P.O. Box 7706, Wichita, Kansas 67277; telephone: (316) 517-5800; fax (316) 517-7271; Internet: www.cessnasupport.com. You may review copies of the referenced service information at the FAA, Small Airplane Directorate, 901 Locust, Kansas City, Missouri 64106. For information on the availability of this material at the FAA, call (816) 329-4148.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov>; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this proposed AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (phone: 800-647-5527) is in the ADDRESSES section. Comments will be available in the AD docket shortly after receipt.

FOR FURTHER INFORMATION CONTACT: Gary Park, Aerospace Engineer, Wichita Aircraft Certification Office (ACO), FAA, 1801 Airport Road, Wichita, KS 67209; phone: (316) 946-4123; fax: (316) 946-4107; email: gary.park@faa.gov.

SUPPLEMENTARY INFORMATION:

Comments Invited

We invite you to send any written relevant data, views, or arguments about this proposal. Send your comments to an address listed under the ADDRESSES section. Include “Docket No. FAA-2012-1330; Directorate Identifier 2012-CE-006-AD” at the

beginning of your comments. We specifically invite comments on the overall regulatory, economic, environmental, and energy aspects of this proposed AD. We will consider all comments received by the closing date and may amend this proposed AD because of those comments.

We will post all comments we receive, without change, to <http://www.regulations.gov>, including any personal information you provide. We will also post a report summarizing each substantive verbal contact we receive about this proposed AD.

Discussion

We have received several reports of structural damage to Cessna Models LC41-550FG and LC42-550FG airplanes due to “wheel walking” anomalies. These incidents were all precipitated by pilots applying maximum braking at high speeds, leading to locked wheels and prolonged tire skidding. The main landing gear struts developed a severe oscillatory yawing motion or “wheel walking” as the airplane decelerated.

This “wheel walking” motion resulted in significant structural damage to the aft fuselage skin, affecting the inside skin and adjacent structure near the leading edge of the horizontal stabilizer. This condition, if not corrected, could result in further significant structural damage to the airplane.

FAA’s Determination

We are proposing this AD because we evaluated all the relevant information and determined the unsafe condition described previously is likely to exist or develop in other products of the same type design.

Proposed AD Requirements

This proposed AD would require insertions into the pilot’s operating handbook (POH) and the airplane maintenance manuals (AMM) regarding proper use of the brakes and inspection of the aft fuselage.

Costs of Compliance

We estimate that this proposed AD affects 726 airplanes of U.S. registry.

We estimate the following costs to comply with this proposed AD:

Estimated costs

Action	Labor cost	Parts cost	Cost per product	Cost on U.S. operators
Insertion of manuals and inspection of aft fuselage.	4.5 work-hours X \$85 per hour = \$382.50	Not applicable	\$382.50	\$277,695

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. Subtitle VII: Aviation Programs, describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in Subtitle VII, Part A, Subpart III, Section 44701: "General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this proposed AD would not have federalism implications under Executive Order 13132. This proposed AD would not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this proposed regulation:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

The Proposed Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA proposes to amend 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

- 1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

- 2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

Cessna Aircraft Company: Docket No. FAA-2012-1330; Directorate Identifier 2012-CE-006-AD.

(a) Comments Due Date

We must receive comments by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE Federal Register].

(b) Affected ADs

None.

(c) Applicability

(1) This AD applies to the following Cessna Aircraft Company (previously COLUMBIA or LANCAIR) Models LC40-550FG, LC41-550FG, and LC42-550FG airplanes that are certificated in any category:

(i) LC40-550FG (Model 300), serial numbers 40001 through 40079;

(ii) LC41-550FG (Model 400), serial numbers 41001 through 41108, 41501 through 41533, 41563 through 41800, and 411001 through 411161; and

(iii) LC42-550FG (Model 350), serial numbers 42001 through 42084, 42501 through 42569, and 421001 through 421020.

(d) Subject

Joint Aircraft System Component (JASC)/Air Transport Association (ATA) of America Code 5300, Fuselage Structure (General).

(e) Unsafe Condition

This AD was prompted by reports that during maximum braking, if the brakes lock up and a skid occurs, a severe oscillatory yawing motion or “wheel walk” may develop, which could result in significant structural damage to the airplane. We are proposing this AD to correct the unsafe condition on these products.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Required Actions

(1) Within the next 50 hours time-in-service (TIS) after the effective date of this AD or within the next 3 months after the effective date of this AD, whichever occurs first, incorporate figure 1 of paragraph (g) of this AD into the applicable Pilot’s Operating Handbook (POH)/FAA-approved Airplane Flight Manual (AFM), Section 2, Limitations (Other Limitations). This may also be done by inserting a copy of this AD into the POH/AFM.

AFT FUSELAGE INSPECTION

If tire skidding occurs and a severe oscillatory yawing motion, “wheel walking” occurs, an Aft Fuselage Inspection must be performed in accordance with the airplane maintenance manual by an appropriately rated mechanic prior to further flight.

Figure 1 of paragraph (g)

(2) Within the next 50 hours TIS after the effective date of this AD or within the next 3 months after the effective date of this AD, whichever occurs first, incorporate figure 2 of paragraph (g) of this AD into the applicable POH/AFM at the end of each of the following sections:

(i) Section 4, Normal Procedures (Amplified Procedures): Landings, Normal Landings; and

(ii) Section 4, end of paragraph: Short Field Landings.

This may also be done by inserting a copy of this AD into the POH/AFM.

WARNING

IF TIRE SKIDDING OCCURS, IMMEDIATELY REDUCE BRAKE PEDAL PRESSURE. IF TIRE SKIDDING IS ALLOWED TO CONTINUE, A SEVERE OSCILLATORY YAWING MOTION, “WHEEL WALKING,” COULD DEVELOP. IF THIS SEVERE OSCILLATORY YAWING MOTION OCCURS, AN AFT FUSELAGE INSPECTION MUST BE PERFORMED IN ACCORDANCE WITH THE AIRPLANE MAINTENANCE MANUAL BY AN APPROPRIATELY RATED MECHANIC PRIOR TO FURTHER FLIGHT.

Figure 2 of paragraph (g)

(3) Within the next 50 hours TIS after the effective date of this AD or within the next 3 months after the effective date of this AD, whichever occurs first, incorporate the Cessna maintenance manual revisions for the appropriate airplane from the following list:

(i) Model LC40-550FG, Cessna Maintenance Manual 300MM02, Revision 2, Chapter 20-95-00, section titled “Tap Testing – Description and Operation”; Chapter 20-95-02, section titled “Structural Inspections – Description and Operation”; and Chapter 53-70-00, section titled “Fuselage Components – Adjustment/Test”; all dated July 1, 2012.

(ii) Model LC41-550FG/T240, Cessna Maintenance Manual 400MM02, Revision 2, dated July 1, 2012, Chapter 20-90-00, section titled “Tap Testing – Description and Operation”; Chapter 20-95-00, section titled “Structural Inspections – Description and Operation”; and Chapter 53-70-00, section titled “Fuselage Components – Adjustment/Test”; all dated July 1, 2012.

(iii) Model LC42-550FG, Cessna Maintenance Manual 350MM02, Revision 2, dated July 1, 2012, Chapter 20-95-00, section titled “Tap Testing – Description and Operation”; Chapter 20-95-02, section titled “Structural Inspections – Description and Operation”; and Chapter 53-70-00, section titled “Fuselage Components – Adjustment/Test”; all dated July 1, 2012.

Note for paragraph (g)(3) of this AD: We recommend you replace your current maintenance manual in its entirety with the appropriate Cessna Maintenance Manual 300MM02, 350MM02, or 400MM02, all Revision 2, all dated July 1, 2012, that would apply to your airplane.

(4) The actions required by paragraphs (g)(1), (g)(2), and (g)(3) of this AD may be performed by the owner/operator (pilot) holding at least a private pilot certificate and must be entered into the aircraft records showing compliance with this AD in accordance with 14 CFR § 43.9 (a)(1)-(4) and 14 CFR § 91.417(a)(2)(v). The record must be maintained as required by 14 CFR § 91.417, 121.380, or 135.439.

(5) At the next annual inspection after the effective date of this AD or within the next 50 hours TIS after the effective date of this AD, whichever occurs later, and prior to

further flight if a severe oscillatory yawing motion as described in figure 1 of paragraph (g)(1) of this AD has occurred, inspect the aft fuselage following the aft fuselage inspection procedures for the appropriate model of airplane as follows:

(i) LC40-550FG (Model 300), Cessna Maintenance Manual 300MM02, Revision 2, dated July 1, 2012:

- (a) Tap Testing: Chapter 20-95-00, section titled “Tap Testing – Description and Operation”;
- (b) Visual Testing: Chapter 20-95-02, section titled “Structural Inspections – Description and Operation”; and/or
- (c) Fuselage: Chapter 53-70-00, section titled “Fuselage Components – Adjustment/Test.”

(ii) Model LC41-550FG/T240, Cessna Maintenance Manual 400MM02, Revision 2, dated July 1, 2012:

- (a) Tap Testing: Chapter 20-90-00, section titled “Tap Testing – Description and Operation”;
- (b) Visual Testing: Chapter 20-95-00, section titled “Structural Inspections – Description and Operation”; and/or
- (c) Fuselage: Chapter 53-70-00, section titled “Fuselage Components – Adjustment/Test.”

(iii) Model LC42-550FG, Cessna Maintenance Manual 350MM02, Revision 2, dated July 1, 2012:

- (a) Tap Testing: Chapter 20-95-00, section titled “Tap Testing – Description and Operation”;
- (b) Visual Testing: Chapter 20-95-02, section titled “Structural Inspections – Description and Operation”; and/or

(c) Fuselage: Chapter 53-70-00, section titled “Fuselage Components – Adjustment/Test.”

(6) If any damaged or suspect areas are found during any aft fuselage inspection required by paragraph (g)(5) of this AD, before further flight, contact Cessna Customer Service by phone at (316) 517-5800 or fax at (316) 517-7271 for an FAA-approved repair and perform the repair.

(h) Credit for Actions Accomplished in Accordance with Previous Service Information

Cessna Aircraft Company released the following POH/AFM Temporary Revisions via Cessna Service Bulletin SB 10-11-01, dated August 17, 2010. Incorporation of the applicable document below is considered compliance with the POH/AFM change requirements in paragraphs (g)(1) and (g)(2) of this AD. The affected POH/AFM Temporary Revisions are:

- Cessna Corvalis 300: RA050001-O TR03-06, dated August 13, 2010;
- Cessna Corvalis 350: RB050005-I TR08-11 (Garmin G1000-equipped) and RB050000-R TR02-05 (Avidyne Entegra-equipped), dated August 13, 2010; and
- Cessna Corvalis 400: RC050005-I TR10-13 (Garmin G1000-equipped) and RC050002-G TR02-05 (Avidyne Entegra-equipped), dated August 13, 2010.

(i) Alternative Methods of Compliance (AMOCs)

(1) The Manager, Wichita Aircraft Certification Office (ACO), FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the manager of the ACO, send it to the attention of the person identified in the Related Information section of this AD.

(2) Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office.

(j) Related Information

(1) For more information about this AD, contact Gary Park, Aerospace Engineer, Wichita ACO, FAA, 1801 Airport Road, Wichita, KS 67209; phone: (316) 946-4123; fax: (316) 946-4107; email: gary.park@faa.gov.

Issued in Kansas City, Missouri, on December 17, 2012.

Earl Lawrence,
Manager, Small Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2012-30753 Filed 12/20/2012 at 8:45 am; Publication Date: 12/21/2012]